

To: Harris County Precinct Two Commissioner Adrian Garcia
From: Katie Short, Director; Amber Weed, Chief of Staff and Policy
Director; Amy Rose, Senior Analyst; Ramin Naderi, Analyst
CC: Mike Lykes, Kris Banks, and Michelle Galindo with Precinct Two;
Barbie Robinson, Gwen Sims, and Will Hudson with Harris County
Public Health
Date: November 9, 2021
Re: **Monthly Memo on COVID-19 Vaccine Distribution, November
2021**

EXECUTIVE SUMMARY

In January 2021, Precinct Two requested the Analyst's Office produce a monthly memo regarding the distribution of COVID-19 vaccinations in Harris County. This is the eleventh memo of a standing monthly memo the Analyst's Office produces as the vaccine distribution continues to evolve at the federal, state, and local levels.

This memo provides an overview of the COVID-19 pandemic and vaccine distribution in Harris County. Key findings from the data in this memo include:ⁱ

- As of October 26, 2021, **54.4% (2,575,464) of individuals in Harris County were fully vaccinated.**
- As of October 26, 2021, **8.5% (400,359) of individuals in Harris County were partially vaccinated.**
- As of October 26, 2021, **3.9% (185,360) of individuals had received booster shots.**
- Between September 26, 2021 and October 26, 2021, **the number of individuals in Harris County vaccinated with at least one dose increased by 2.7% (from 2,898,404 to 2,975,823).**
- Between September 26, 2021 and October 26, 2021, **the number of individuals in Harris County fully vaccinated increased by 4.2% (from 2,471,866 to 2,575,464).**
- **Zip codes 77336 and 77090 have the fewest number of individuals per 100,000 residents fully vaccinated (34,820 and 36,671 respectively).**
- **Zip codes 77098 and 77019 have the greatest number of individuals per 100,000 residents fully vaccinated (81,290 and 84,297, respectively).ⁱⁱ**
- **The median of the median incomes of the fifteen Harris County zip codes with the fewest number of individuals per 100,000 residents fully vaccinated is \$48,500.**

ⁱ IMPORTANT NOTE: Not all data sums to totals reported. This is due to poor and inconsistent data reporting by providers, and because patients have not been required to disclose all demographic data. DSHS reports it is actively conducting county and provider-level analyses to identify if certain providers or areas are underreporting more than others for targeted data entry funding and training.

ⁱⁱ Zip code analysis excludes zip codes that report a greater number of residents vaccinated than the zip code's total population. This discrepancy is due to poor and limited data.

- The median of the median incomes of the fifteen Harris County zip codes with **the greatest number of individuals per 100,000 residents fully vaccinated is \$91,138.**
- The number of individuals fully vaccinated in Harris County varies by age group.
 - **77.6% (149,102) of individuals ages 75 and over are fully vaccinated;**
 - **79.4% (453,290) of individuals ages 60-74 are fully vaccinated;**
 - **74.9% (629,878) of individuals ages 45-59 are fully vaccinated;**
 - **64.5% (677,175) of individuals ages 30-44 are fully vaccinated; and**
 - **53.9% (665,638) of individuals ages 12-29 are fully vaccinated.**
- The number of individuals fully vaccinated in Harris County varies by race and ethnicity.
 - **33.8% (299,401) of individuals who identify as Black are fully vaccinated;**
 - **45.9% (933,366) of individuals who identify as Hispanic are fully vaccinated;**
 - **50.2% (656,829) of individuals who identify as White are fully vaccinated;**
 - **58.0% (201,954) of individuals who identify as Asian American/Pacific Islander are fully vaccinated; and**
 - **74.7% (6,295) of individuals who identify as American Indian/Alaskan Native are fully vaccinated.**
- The demographic in Harris County with the highest percentage of individuals vaccinated are individuals who identify as Hispanic aged 65-74 (75%). The demographic with the lowest percentage of individuals vaccinated are individuals who identify as Black aged 12-29 (26%).
- Between January 1, 2020 and October 26, 2021:
 - **All providers in Harris County administered a cumulative 6,058,791 COVID-19 PCR tests;ⁱⁱⁱ**
 - **There were 574,100 positive COVID-19 cases confirmed by a PCR test in Harris County; and**
 - **There were 6,130 confirmed COVID-19-related deaths in Harris County.**

The Analyst's Office acknowledges Harris County Public Health and the Harris County Office of Management and Budget for their significant contributions to this memo.

ⁱⁱⁱ PCR refers to the polymerase chain reaction or nucleic acid amplification tests commonly used to test for COVID-19.

INTRODUCTION

In January 2021, Precinct Two requested the Harris County Commissioners Court's Analyst's Office (the "Analyst's Office") produce a monthly memo regarding the distribution and administration of COVID-19 vaccinations in Harris County. This is the eleventh memo of a standing monthly memo the Analyst's Office produces as the vaccine distribution continues to evolve at the federal, state, and local levels.

This memo includes data and analysis regarding COVID-19 testing, cases, deaths, and vaccine administration in Harris County. Precinct-level age, race, and ethnicity data are provided where available.

METHODOLOGY

Data utilized in this memo are from Harris County Public Health (HCPH); the Centers for Disease Control and Prevention (CDC); and Harris County's Applied Technologies Location Analysis and Statistics (ATLAS) System. Data reflect COVID-19 vaccine doses administered in Harris County by all providers from the beginning of the vaccine rollout, December 14, 2020, through October 26, 2021, and all testing, confirmed cases, and COVID-19-related death data from January 1, 2020 through October 26, 2021.

All references to "fully vaccinated" refer to the administration of either a two-dose or one-dose vaccine. "Fully vaccinated" excludes any third shots (or "booster" shots) administered.

Data Collected from Harris County Public Health (HCPH)

The majority of data in this memo was sent to the Analyst's Office from HCPH, which analyzes vaccine data received by the Texas Department of State Health Services (DSHS) ImmTrac2 system. As the Local Health Authority for the County, HCPH also analyzes and receives testing, confirmed cases, and COVID-19-related death data from local health providers (including the City of Houston) and other sources. Income data provided by HCPH reflects American Community Survey, 2014-2018 Five-Year Estimates. HCPH data and/or analysts aided in the development of all tables and figures.

DSHS advised the following via email regarding the data available on ImmTrac2:

- Providers in Texas have up to 24-hours to report doses administered in ImmTrac2, and the dashboard is updated by 4:00 pm with data reported as of 11:59 pm the previous night. This means there could be as much as a 48-hour lag between when a dose is administered and when it appears on ImmTrac2.

Prior to the fifth version of this memo, which was circulated on June 3, 2021, this memo included updates and projections on vaccine allocations for the State of Texas or Harris County using DSHS data. However, as of May 10, 2021, DSHS announced it is no longer distributing weekly allocations of vaccine doses to providers due to a "sufficient supply of vaccine."^{iv} Due to this changed strategy of allocating vaccines, this

^{iv} Department of State Health Services (DSHS) COVID-19 Vaccine Allocations. Retrieved May 27, 2021, from <https://www.dshs.state.tx.us/coronavirus/immunize/vaccineallocations.aspx>

memo no longer provides updates and projections for vaccine allocations to the State of Texas or Harris County.

Data Collected from Centers for Disease Control and Prevention (CDC)

The Analyst's Office collected information on social vulnerability from the Centers for Disease Control and Prevention (CDC). Social vulnerability refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills.^v The Social Vulnerability Index (SVI) was created by the CDC and depicts the social vulnerability of communities, at the census tract level, within a given county. SVI groups fifteen census-derived factors into four themes that summarize the extent to which the area is socially vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. Overall Social Vulnerability Index combines all the variables to provide a comprehensive assessment. SVI data aided with the development of Table 1.

Data Collected from Applied Technologies Location Analysis and Statistics (ATLAS)

The Analyst's Office collected commissioner precinct zip code data from Harris County's Applied Technologies Location Analysis and Statistics (ATLAS) System.

Data Collected from Harris County Office of Management and Budget

The Analyst's Office collected commissioner precinct race and ethnicity data from the Harris County Office of Management and Budget.

NOTE: All analyses in this memo, except **Figure 3**, reflect *individuals fully vaccinated*, rather than *individuals with at least one dose*.

Prior versions of this memo used population statistics for Harris County from the 2019 American Community Survey (ACS) 1 Year Estimates. All data in this memo uses population estimates from the recently released 2020 Census, except **Table 2**, **Figure 4**, and **Figure 5**, which use 2019 ACS estimates.

^v Centers for Disease Control (CDC) Social Vulnerability Index, a tool to identify socially vulnerable communities.

BACKGROUND

The spread of the novel coronavirus, the cause of COVID-19, began in the United States in early 2020. Since then, local health entities have tracked the testing, the number of confirmed positive cases, and deaths related to COVID-19.

In December 2020, two-dose vaccines from two producers, Moderna and Pfizer-BioNTech, were authorized for emergency use by the US Food and Drug Administration (FDA). In February 2021, the FDA authorized Johnson & Johnson's (J&J) one-dose vaccine for emergency use. On August 23, 2021, the FDA granted full approval to the Pfizer-BioNTech vaccine for those 16 and older, with continued availability for those 12-15 years of age under emergency use authorization. The Pfizer-BioNTech vaccine is currently the only vaccine approved by the FDA not under emergency use authorization.^{vi}

From December 2020 to March 28, 2021, vaccines were made available for individuals in DSHS's Phase 1A (front-line healthcare workers and residents of long-term care facilities) and 1B (individuals ages 65+ and individuals ages 16+ with "at least one chronic medical condition that puts them at increased risk for severe illness from the virus that causes COVID-19").^{vii viii} On March 29, 2021, Texas expanded vaccine eligibility to all individuals age 16 and older. Beginning May 12, 2021, Texas expanded vaccine eligibility to all individuals age 12 and older. Currently, all vaccines are authorized for individuals age 18 and older; the Pfizer-BioNTech vaccine is authorized for individuals age 12 and older.^{ix}

On August 12, 2021, the FDA amended the emergency use authorizations for the Moderna and Pfizer-BioNTech vaccines to allow for an additional third dose, a "booster," to be administered to immunocompromised individuals.^x On September 22, 2021 the FDA amended the emergency use authorization for the Pfizer-BioNTech COVID-19 Vaccine to allow for use of a single booster dose in certain populations.^{xi} On October 20, 2021 the FDA further expanded the emergency use authorization to permit single dose booster shots of the Moderna and Johnson & Johnson COVID-19 vaccines.^{xiii xiv}

^{vi} *FDA Approves First COVID-19 Vaccine*. (August 23, 2021). US Food and Drug Administration. Retrieved August 30, 2021 from <https://www.fda.gov/news-events/press-announcements/fda-approves-first-covid-19-vaccine>

^{vii} Department of State Health Services (DSHS) COVID-19 Vaccine Allocation Phase 1 Definition

^{viii} Department of State Health Services (DSHS) COVID-19 Vaccine Allocation Phase 1B Definition

^{ix} *COVID-19 Vaccine Information*. (n.d.). Texas Department of State Health Services. Retrieved May 27, 2021, from <https://dshs.texas.gov/covidvaccine/>

^x *FDA Authorizes Additional Vaccine Dose for Certain Immunocompromised Individuals*. (August 12, 2021). US Food and Drug Administration. Retrieved August 30, 2021 from <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-authorizes-additional-vaccine-dose-certain-immunocompromised>

^{xi} Pfizer-BioNTech boosters were authorized for individuals 65 years of age and older; individuals 18 through 64 years of age at high risk of severe COVID-19; and individuals 18 through 64 years of age whose frequent institutional or occupational exposure to SARS-CoV-2 puts them at high risk of serious complications of COVID-19 including severe COVID-19.

^{xii} *FDA Authorizes Booster Dose of Pfizer-BioNTech COVID-19 Vaccine for Certain Populations*. (September 22, 2021). US Food and Drug Administration. Retrieved October 28, 2021 from <https://www.fda.gov/news-events/press-announcements/fda-authorizes-booster-dose-pfizer-biontech-covid-19-vaccine-certain-populations>

^{xiii} Moderna boosters are available for individuals 65 years of age and older; 18 through 64 years of age at high risk of severe COVID-19; and 18 through 64 years of age with frequent institutional or occupational exposure to SARS-CoV-2. Johnson & Johnson boosters are available for individuals 18 years of age and older.

^{xiv} *Coronavirus (COVID-19) Update: FDA Takes Additional Actions on the Use of a Booster Dose for COVID-19 Vaccines*. (October 20, 2021). US Food and Drug Administration. Retrieved October 28, 2021 from <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-takes-additional-actions-use-booster-dose-covid-19-vaccines>

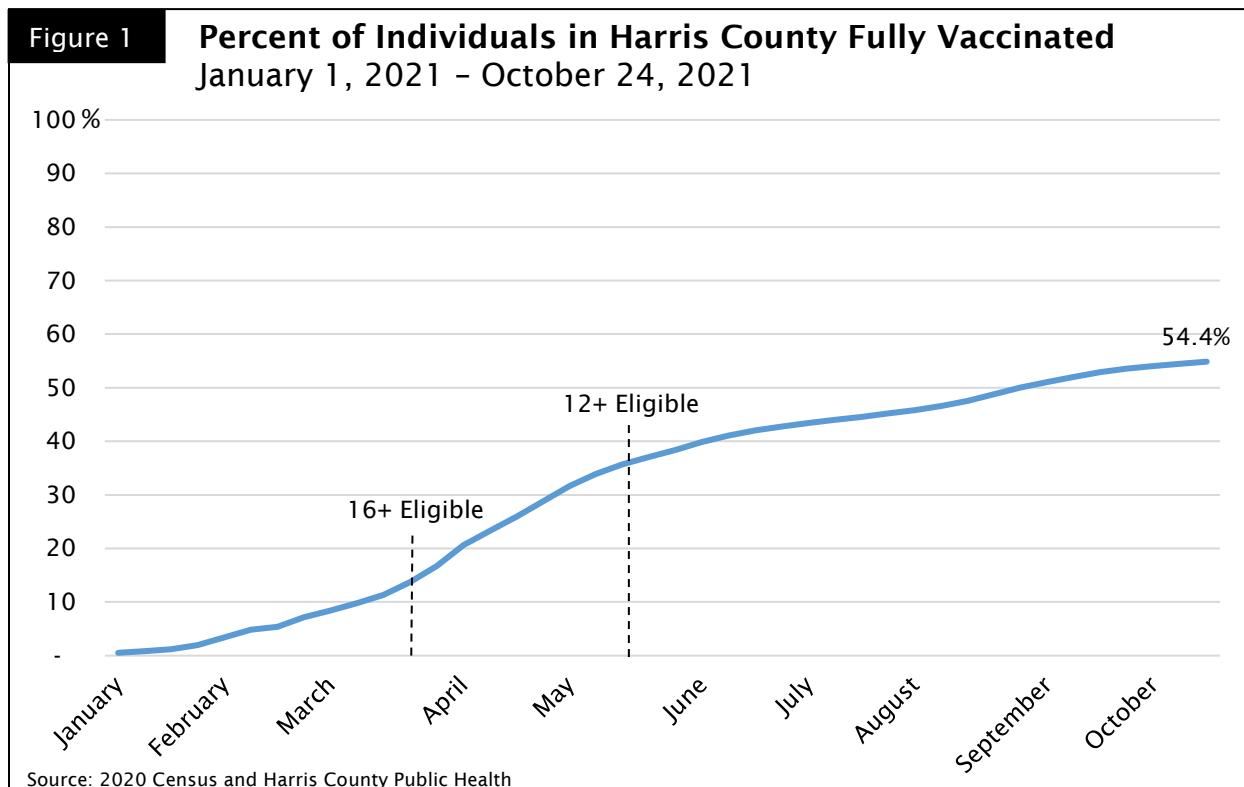
To incentivize unvaccinated residents to seek vaccination, Harris County and the City of Houston launched separate cash card incentive programs for individuals to receive their first dose of vaccination in summer 2021. The Harris County program was launched on August 17, 2021, and offered \$100 cash cards to residents who received their first dose of the COVID-19 vaccine from August 17 to September 30, at any authorized provider in the County.^{xv} Similarly, the City of Houston launched a cash card incentive program on August 26, 2021, stating that the first 20,000 individuals to get fully vaccinated at an eligible health department site would receive \$150 in the form of cash cards; \$100 cash card for their first dose, and an additional \$50 cash card for their second dose.^{xvi} These two incentive programs concluded in September 2021 and there are currently no active incentive programs.

^{xv} *Ready Harris*. (n.d.). Retrieved September 8, 2021, from <https://www.readyharris.org/COVID-19-Incentive-Program>

^{xvi} *Houston Health Department to provide up to \$150 in gift cards for COVID-19 vaccinations*. (n.d.). Retrieved September 8, 2021, from <https://www.houstontx.gov/health/NewsReleases/houston-health-department-to-provide-up-to-150-in-gift-cards-for-covid-19-vaccinations.html>

INDIVIDUALS IN HARRIS COUNTY FULLY VACCINATED

Figure 1 presents the percentage of Harris County individuals fully vaccinated between January 1, 2021 and October 24, 2021.^{xvii} This figure includes individuals vaccinated by Harris County Public Health (HCPH) and all other providers. HCPH reports countywide data regarding individuals fully vaccinated by week—the data presented below extends through the week of October 18 – October 24, 2021.



On March 29, 2021, as shown in **Figure 1**, Texas expanded vaccine eligibility to all individuals age 16 and older. Beginning May 12, 2021, Texas expanded vaccine eligibility to all individuals age 12 and older.

As of October 24, 2021, 54.4% (2,575,464) of all individuals in Harris County were fully vaccinated, meaning an individual has received both doses of either the Moderna or Pfizer-BioNTech vaccines or a single dose of the Johnson & Johnson vaccine.^{xviii} This reflects a 4.2% (from 2,471,866 to 2,575,464) increase from September 26, 2021 (the prior memo). As of October 26, 2021, a total of 8.5% (400,359) of all individuals in Harris County were partially vaccinated and 3.9% (185,360) of individuals had received booster shots.^{xix}

^{xvii} Individuals who are partially vaccinated and individuals fully vaccinated are mutually exclusive, meaning individuals partially vaccinated only includes individuals who have received one vaccine dose of a two-dose shot (Pfizer or Moderna) and individuals fully vaccinated include individuals who have received either the Johnson & Johnson vaccine or two vaccine doses of Pfizer or Moderna.

^{xviii} Figure assumes Harris County's total population of 4,731,145, per the US Census Bureau's 2020 Decennial Census.

^{xix} Figure assumes Harris County's total population of 4,731,145, per the US Census Bureau's 2020 Decennial Census.

NUMBER OF INDIVIDUALS PER 100,000 RESIDENTS FULLY VACCINATED BY ZIP CODE

Table 1 presents the number of individuals per 100,000 residents fully vaccinated by zip code. The table also includes the median income, Social Vulnerability Index (SVI) score, and commissioner precinct for each zip code. Commissioner precinct boundaries do not align with zip code boundaries; some zip codes are in multiple precincts. Precincts are listed in order of the greatest to least percentage of zip code land mass within the precinct.

Social vulnerability describes a community's ability to prevent human suffering and financial loss in the event of a disaster (such as a hurricane or disease outbreak).^{xx} SVI rankings are based on percentiles ranging from 0 to 1 (with higher values indicating greater vulnerability). SVI data is often presented using quartile classification. This analysis utilizes CDC's SVI classifications as follows: 0-0.25 (lowest vulnerability); 0.25-0.5 (moderate low); 0.50-0.75 (moderate high); and 0.75-1 (highest vulnerability).

Table 1 ranks zip codes within Harris County to show relative vulnerability in comparison to the rest of Harris County. The median of the median incomes of the fifteen Harris County zip codes with the **fewest number of individuals per 100,000 residents fully vaccinated is \$48,500**. The median of the median incomes of the fifteen Harris County zip codes with the **greatest number of individuals per 100,000 residents fully vaccinated is \$91,138**.^{xxi}

This analysis excludes zip codes 77024, 77027, 77010, 77056, 77507, 77030, 77523, 77498, and 77046 because they report higher vaccinated populations than the reported zip code population. HCPH suggests that this is likely due to the low population relative to other zip codes, which means measured parameters are sensitive to bad data such as data entry errors, individuals using business addresses in lieu of a home residence, and other factors. For a full list of zip codes, see Appendix D.

^{xx} Centers for Disease Control (CDC) SVI 2016 Documentation.

^{xxi} Analysis excludes zip codes with small percentage of land mass in Harris County and zip code 77507, which has no income data available.

Table 1

Number of Individuals Per 100,000 Residents Fully Vaccinated by Zip Code, Median Income, SVI, and Commissioner Precinct December 14, 2020 – October 26, 2021

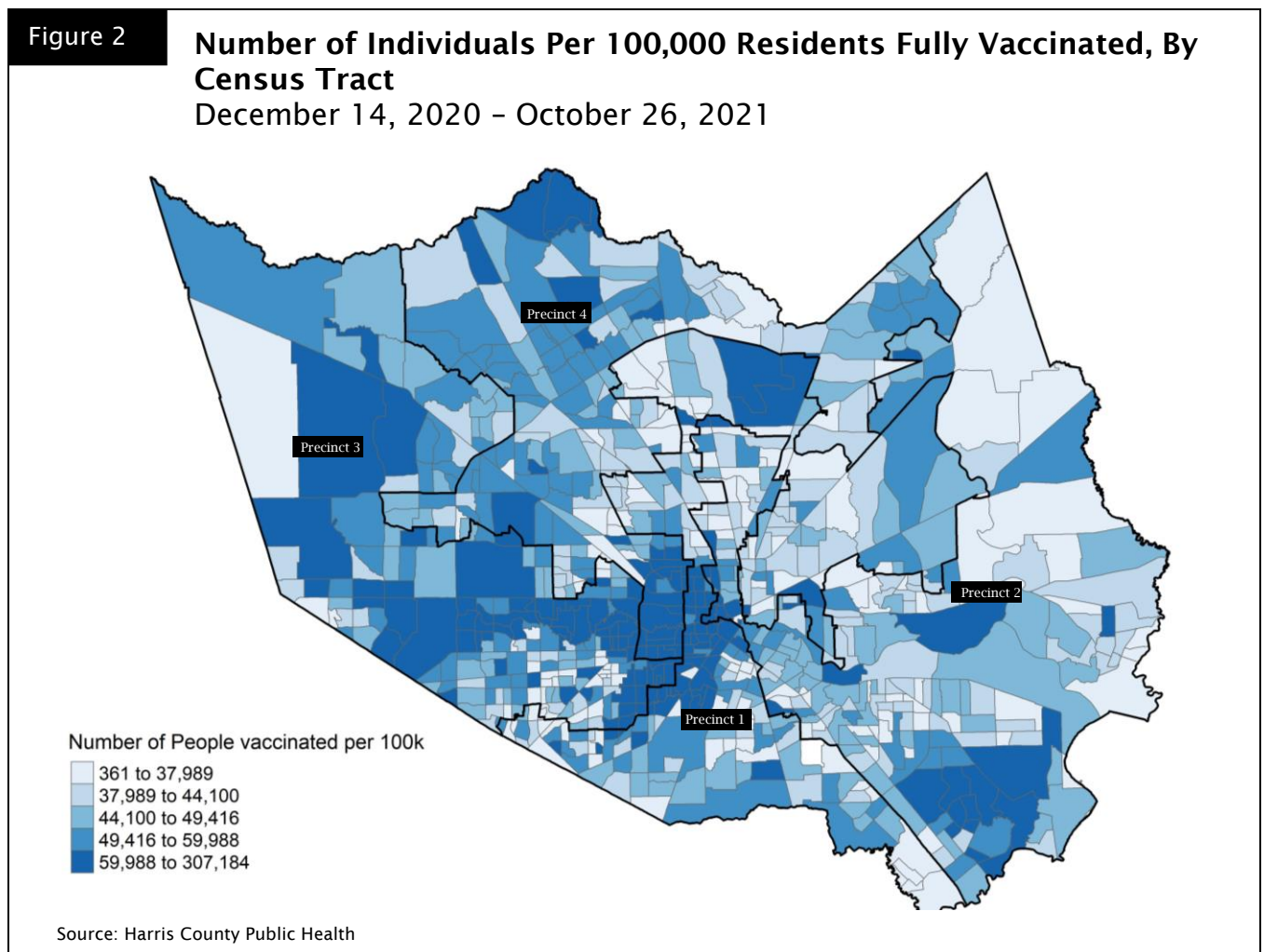
Zip Codes With Fewest Number of Individuals Per 100,000 Residents Fully Vaccinated				
Zip Code	Number Per 100k	Median Income	SVI	Commissioner Precinct(s)
77336	34,820	\$68,596	0.30	2,4
77090	36,671	\$39,808	0.70	1,4
77532	39,252	\$67,824	0.37	2
77562	40,200	\$59,792	0.63	2
77520	42,678	\$50,461	0.82	2
77067	42,883	\$43,282	0.79	4,1
77050	42,947	\$48,500	0.71	1,2
77004	42,998	\$51,309	0.53	1
77530	43,082	\$61,149	0.59	2,1
77060	43,437	\$31,006	0.94	1,2,4
77013	45,180	\$38,665	0.98	2,1
77091	45,260	\$36,098	0.92	1,4
77036	45,368	\$30,952	0.93	3,1
77503	45,640	\$51,312	0.82	2
77028	46,024	\$29,014	0.84	1
Zip Codes With Greatest Number of Individuals Per 100,000 Residents Fully Vaccinated				
Zip Code	Number Per 100k	Median Income	SVI	Commissioner Precinct(s)
77041	62,534	\$87,489	0.31	4,3
77094	62,621	\$178,354	NA	3
77054	62,955	\$50,827	0.26	1
77083	65,271	\$54,425	0.53	3
77025	65,852	\$76,772	0.32	1,3
77032	69,283	\$32,473	0.99	1,2
77006	69,921	\$85,956	0.09	1
77008	70,671	\$108,644	0.08	4,1
77005	71,018	\$192,380	0.03	3,1
77002	71,983	\$71,369	0.42	1,2
77059	72,864	\$139,163	0.05	2
77007	73,703	\$125,653	0.01	4,1,2
77401	76,805	\$193,950	0.03	3
77098	81,290	\$91,138	0.07	4,1,3
77019	84,297	\$116,207	0.09	4,1

Highest Vulnerability
Moderate High Vulnerability
Moderate Low Vulnerability
Lowest Vulnerability

Source: Population estimates from 2020 Census; income data from American Community Survey (ACS) 2019 5-year estimates downloaded from Harris County's Applied Technologies Location Analysis and Statistics (ATLAS); and SVI and vaccination rates from Harris County Public Health

NUMBER OF INDIVIDUALS PER 100,000 RESIDENTS FULLY VACCINATED BY CENSUS TRACT

Figure 2 presents the number of individuals per 100,000 Harris County residents fully vaccinated by census tract.

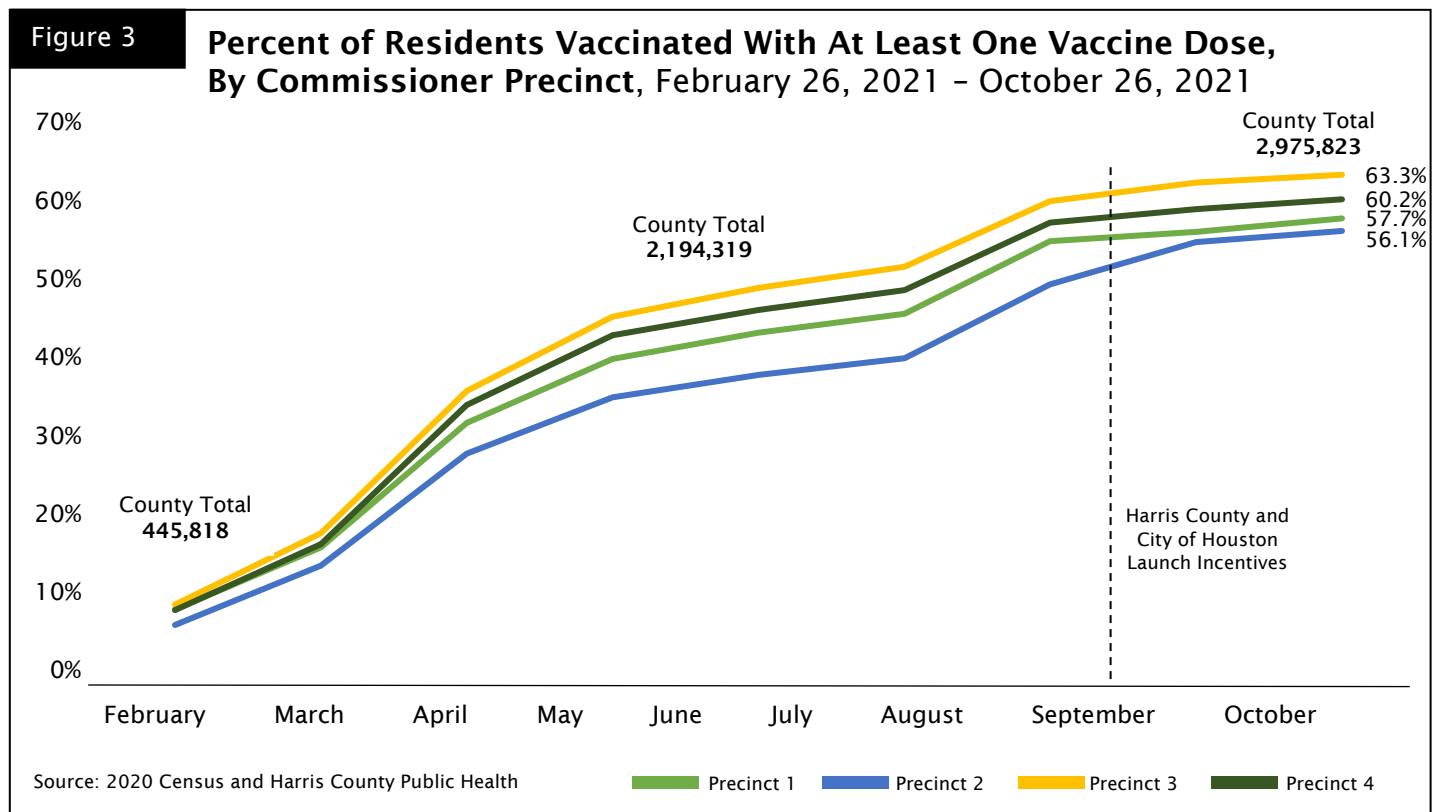


As of October 26, 2021, **54.4% (2,575,464)** of Harris County residents were fully vaccinated.^{xxii}

^{xxii} Figure assumes Harris County population of 4,731,145 according to the 2020 Census.

PERCENT OF RESIDENTS VACCINATED WITH AT LEAST ONE DOSE BY COMMISSIONER PRECINCT

Figure 3 demonstrates the growth in the percent of residents vaccinated *with at least one dose* by commissioner precinct from February 26, 2021 through October 26, 2021, for all four Harris County commissioner precincts.



Between February 26, 2021 and October 26, 2021, 62.9% (2,975,823) of individuals in Harris County were vaccinated with at least one vaccine dose.^{xxiii} There was an increase of 2.7% (from 2,898,404 to 2,975,823) between September 26, 2021 (the prior memo) and October 26, 2021, of individuals vaccinated with at least one dose.

As of October 26, 2021:^{xxiv}

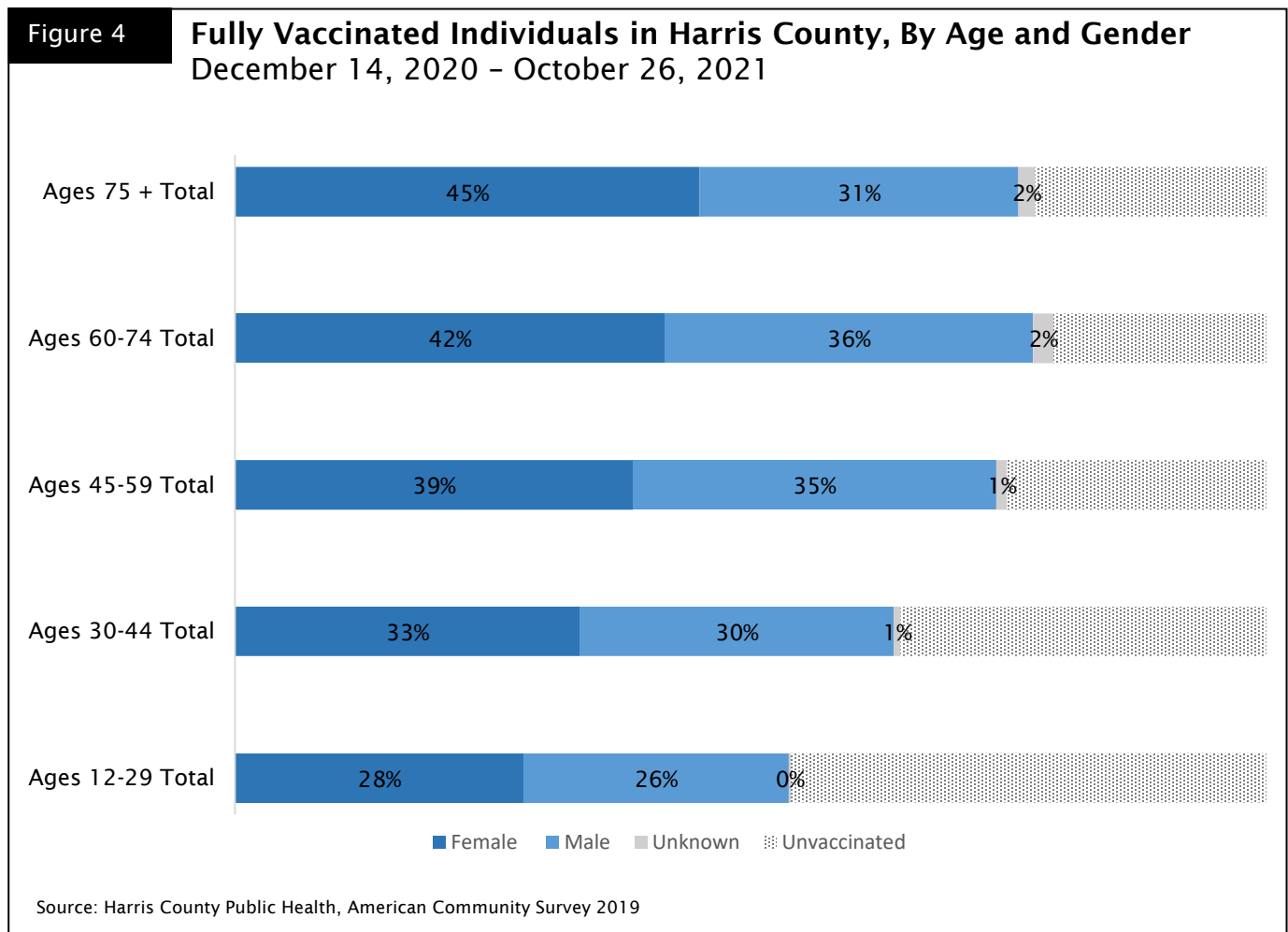
- **57.7% (680,526) of Precinct One residents** were vaccinated with at least one vaccine dose—a 2.4% increase over the prior memo;
- **56.1% (593,891) of Precinct Two residents** were vaccinated with at least one vaccine dose—a 2.6% increase over the prior memo;
- **63.3% (803,336) of Precinct Three residents** were vaccinated with at least one vaccine dose—a 1.6% increase over the prior memo; and
- **60.2% (737,468) of Precinct Four residents** were vaccinated with at least one vaccine dose—a 2.2% increase over the prior memo.

^{xxiii} Figure assumes Harris County's total population of 4,731,145, per the 2020 Census.

^{xxiv} Precinct totals do not sum to County total because 160,602 individuals have addresses that cannot be geo-coded into a Precinct.

FULLY VACCINATED INDIVIDUALS BY AGE AND GENDER

Figure 4 and **Table 2**, which follows, reflect all individuals fully vaccinated by all providers in Harris County by the individual's age and gender. Each bar for each age group represents the age group's total population within Harris County's population and reflects the percentage of individuals in each age group vaccinated by gender.



Of the individuals who are fully vaccinated by a Harris County provider, 52% (1,346,212) are female; 46% (1,195,770) are male; and 1% (33,101) are recorded as unknown gender.^{xxv} As shown in **Figure 4**, individuals age 75 or older have the smallest percent of their age group who remain unvaccinated (22%), while individuals age 12-29 include the largest percent of their age group who remain unvaccinated (46%).

^{xxv} Age and gender totals do not sum to the total number of fully vaccinated individuals due to some records having incomplete or incorrect data.

FULLY VACCINATED INDIVIDUALS BY AGE GROUP

Table 2 reflects all individuals fully vaccinated by all providers in Harris County by the individual's age group and includes the percentage of Harris County's total age group population vaccinated. For context, Table 2 also includes the percentage of Harris County's total population by age group.

Table 2

Fully Vaccinated Individuals in Harris County by Age Group December 14, 2020 – October 26, 2021			
Age Group	Number of Individuals Vaccinated	Percentage of Age Group Vaccinated ^{xxvi}	Percentage of Total County Population ^{xxvii}
75+	149,102	77.6%	5.0%
60-74	453,290	79.4%	14.8%
45-59	629,878	74.9%	21.8%
30-44	677,175	64.5%	27.2%
12-29	665,638	53.9%	31.1%

Source: Harris County Public Health, American Community Survey 2019 1-Year Estimates

Data in Table 2

- 77.6% (149,102) of individuals ages 75 and over are fully vaccinated;
- 79.4% (453,290) of individuals ages 60-74 are fully vaccinated;
- 74.9% (629,878) of individuals ages 45-59 are fully vaccinated;
- 64.5% (677,175) of individuals ages 30-44 are fully vaccinated; and
- 53.9% (665,638) of individuals ages 12-29 are fully vaccinated.

^{xxvi} Reflects the number of individuals in the age group who are fully vaccinated. Previous versions of this memo reflected the total age group fully vaccinated as a percentage of all individuals vaccinated.

^{xxvii} Age group populations from American Community Survey 2019 data. Age group 12-29 is estimated by the Analyst's Office due to data limitations.

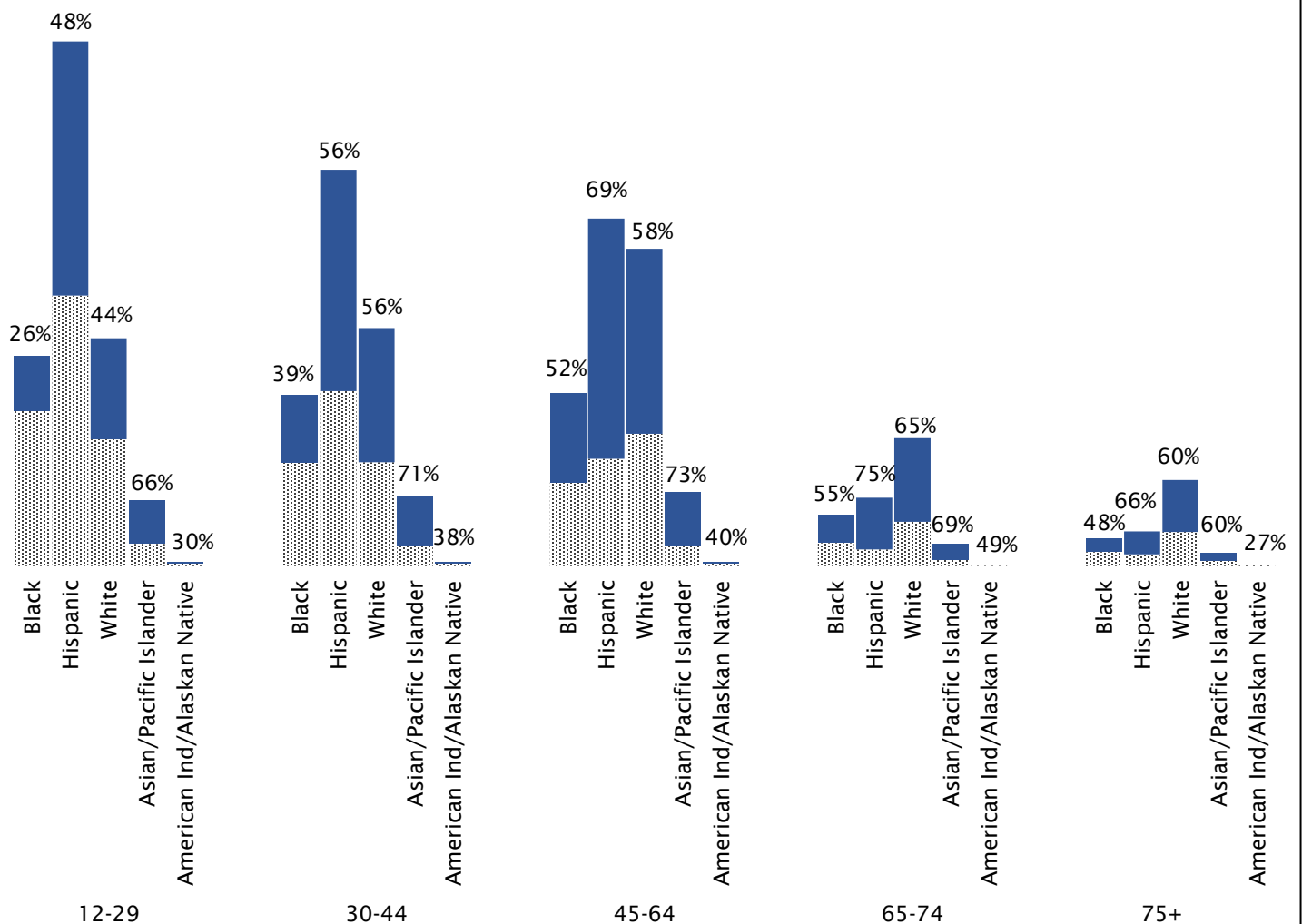
FULLY VACCINATED INDIVIDUALS BY RACE/ETHNICITY AND AGE GROUP

Figure 5 reflects all individuals fully vaccinated by all providers in Harris County by the individual's race and age group. Each bar represents the percentage of individuals vaccinated for the given age range by race/ethnicity. The height of the bars reflects the given race/ethnicity group's proportion of the total population for the given age group.

Figure 5

Fully Vaccinated Individuals in Harris County, By Race/Ethnicity and Age Group

December 14, 2020 - October 26, 2021



Source: American Community Survey 2019 1-Year Estimates and Harris County Public Health

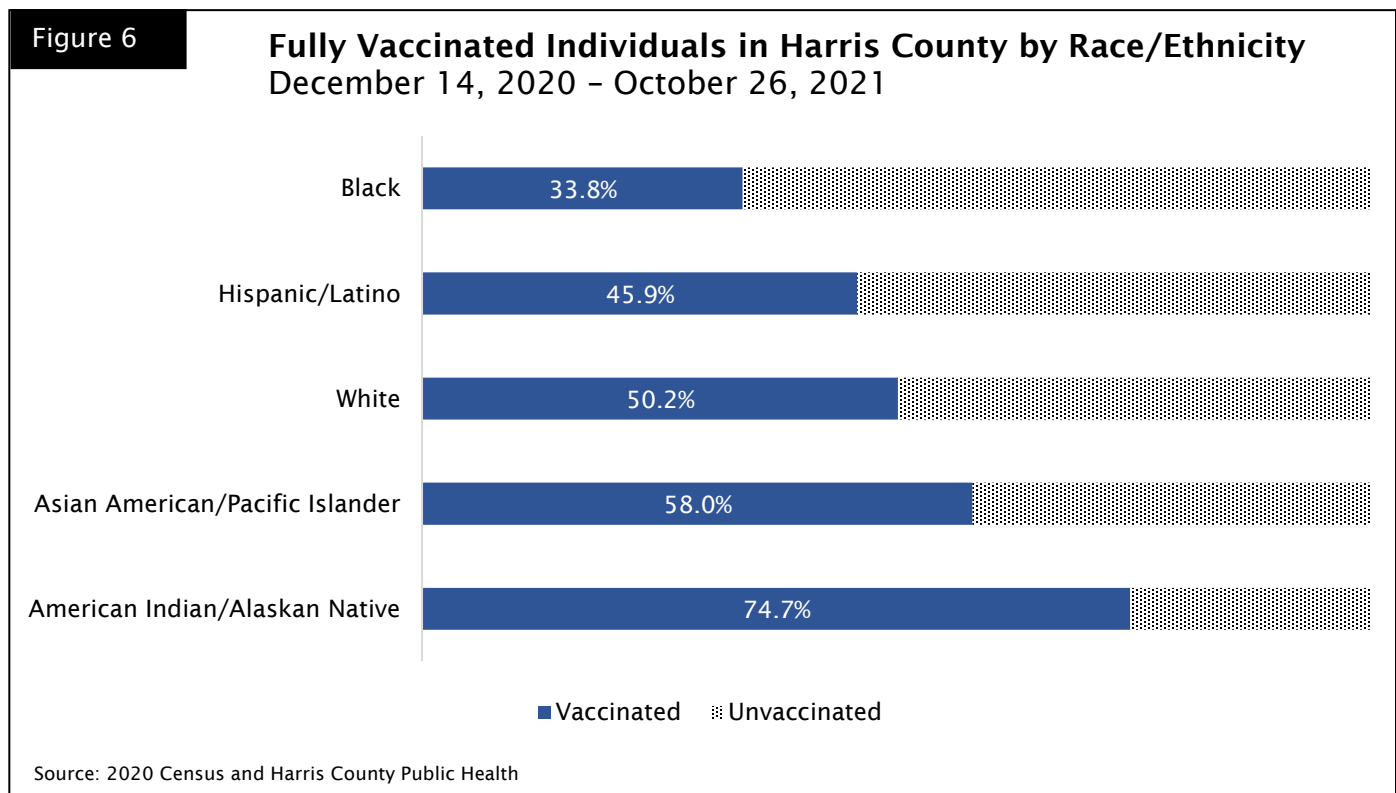
■ Vaccinated ■ Unvaccinated

As shown in **Figure 5**, for individuals fully vaccinated in Harris County, the demographic with the highest percentage of individuals vaccinated are individuals who identify as Hispanic aged 65-74 (75%). The demographic with the lowest percentage of individuals vaccinated are individuals who identify as Black aged 12-29 (26%).

PERCENTAGE OF FULLY VACCINATED INDIVIDUALS BY RACE AND ETHNICITY

Figure 6 and **Table 3** reflect the percentage of individuals in Harris County who are fully vaccinated by all providers in Harris County by race and ethnicity.^{xxviii}

Each bar for each race or ethnicity group represents the race or ethnicity group's total population within Harris County's population and reflects the percentage of individuals in each race and ethnicity group vaccinated.



As shown in **Figure 6**, individuals who identify as Black in Harris County have the smallest vaccinated population at 33.8%, followed by individuals who identify as Hispanic or Latino at 45.9%.

^{xxviii} Note: Prior to February 4, 2021, providers were not required to report race and ethnicity when reporting doses to the Texas Department of State Health Services (DSHS) because vaccine recipients are allowed to decline disclosing their race and ethnicity to a provider.

FULLY VACCINATED INDIVIDUALS BY RACE AND ETHNICITY

Table 3 reflects the race and ethnicity of individuals in Harris County who are fully vaccinated by all providers in Harris County.^{xxx} For context, Table 3 also includes the percentage of Harris County's total population by race and ethnicity.

Previous versions of this table in past memos reflected the total number of individuals by race and ethnicity fully vaccinated as a percentage of all individuals vaccinated—this version of the report shows the percentage vaccinated within a given race or ethnicity.

Table 3

Fully Vaccinated Individuals in Harris County by Race/Ethnicity December 14, 2020 – October 26, 2021			
Race/Ethnicity	Number of Individuals Vaccinated	Percentage of Race/Ethnicity Group Vaccinated ^{xxx}	Percentage of Total Population
White	656,829	50.2%	27.7%
Hispanic/Latino	933,366	45.9%	43.0%
Other/Unknown	277,666	NA	0.5%
Black	299,401	33.8%	18.7%
Asian American/ Pacific Islander	201,954	58.0%	7.4%
Multi-racial	199,953	NA	2.6%
American Indian/ Alaskan Native	6,295	74.7%	0.2%

Source: 2020 Census and Harris County Public Health

As shown in **Table 3**,

- 33.8% (299,401) of individuals who identify as Black are fully vaccinated;
- 45.9% (933,366) of individuals who identify as Hispanic are fully vaccinated;
- 50.2% (656,829) of individuals who identify as White are fully vaccinated;
- 58.0% (201,954) of individuals who identify as Asian American/Pacific Islander are fully vaccinated; and
- 74.7% (6,295) of individuals who identify as American Indian/Alaskan Native are fully vaccinated.

^{xxx} Note: Prior to February 4, 2021, providers were not required to report race/ethnicity when reporting doses to Texas Department of State Health Services (DSHS) because vaccine recipients are allowed to decline disclosing their race/ethnicity to a provider.

^{xxx} Note: The percentage of Harris County's total race and ethnicity group population that is vaccinated for Other/Unknown and Multi-racial is unavailable because there are more vaccinated individuals identifying as Multi-racial and Other/Unknown than the total population estimate of both groups in Harris County's 2020 Census data.

INDIVIDUALS FULLY VACCINATED BY RACE AND ETHNICITY AND COMMISSIONER PRECINCT

Table 4 reflects the race and ethnicity of individuals in Harris County who are fully vaccinated by providers in Harris County by Commissioner Precinct. For context, Table 4 also includes the percentage of each Commissioner Precinct's total population by race and ethnicity.

Table 4

Fully Vaccinated Individuals in Harris County by Race/Ethnicity, By Commissioner Precinct December 14, 2020 – October 26, 2021			
Race/Ethnicity	Number of Individuals Vaccinated	Percentage of Precinct's Vaccinated Population	Percentage of Total Precinct Population
Precinct 1			
White	96,656	16.6%	16.3%
Hispanic/Latino	213,851	36.7%	41.5%
Other/Unknown	56,272	9.7%	0.4%
Black	124,600	21.4%	33.4%
Asian Am./Pacific Islander	38,002	6.5%	6.1%
Multi-racial	51,352	8.8%	2.1%
Am. Indian/Alaskan Native	1,249	0.2%	0.1%
Precinct 2			
White	121,414	23.8%	25.7%
Hispanic/Latino	267,235	52.3%	59.9%
Other/Unknown	42,353	8.3%	0.4%
Black	29,093	5.7%	9.2%
Asian Am./Pacific Islander	20,016	3.9%	2.6%
Multi-racial	30,120	5.9%	2.0%
Am. Indian/Alaskan Native	906	0.2%	0.2%
Precinct 3			
White	203,100	29%	32.8%
Hispanic/Latino	218,073	31%	35.6%
Other/Unknown	66,768	10%	0.6%
Black	63,927	9%	15.7%
Asian Am./Pacific Islander	82,204	12%	12.1%
Multi-racial	62,667	9%	3.0%
Am. Indian/Alaskan Native	1,849	0%	0.2%
Precinct 4			
White	206,529	32.2%	35.0%
Hispanic/Latino	201,740	31.5%	37.6%
Other/Unknown	61,363	9.6%	0.5%
Black	61,811	9.7%	15.9%
Asian Am./Pacific Islander	53,571	8.4%	7.8%
Multi-racial	53,815	8.4%	3.0%
Am. Indian/Alaskan Native	1,598	0.2%	0.2%

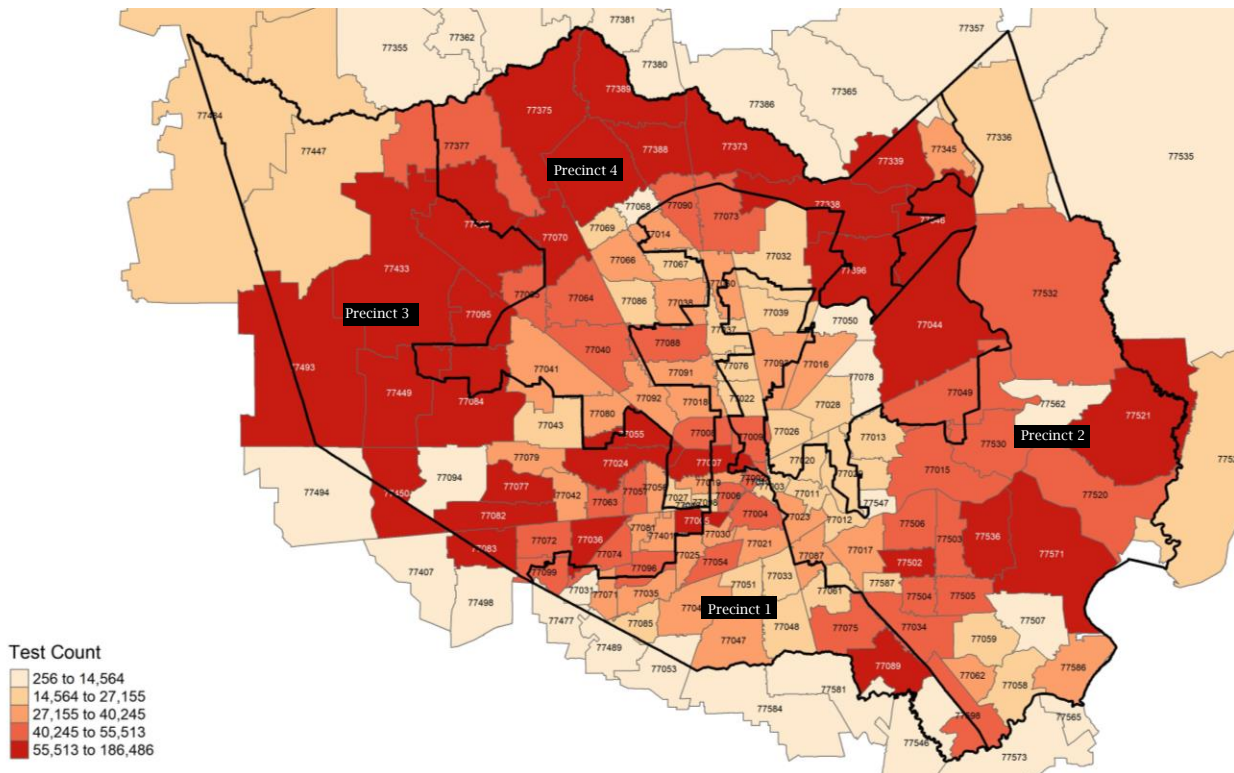
Sources: 2020 Census, Harris County Public Health, and Harris County Office of Management and Budget

COVID-19 TESTS BY ZIP CODE

Figure 7 reflects the total number of COVID-19 polymerase chain reaction (PCR) tests administered to Harris County residents by all providers in Harris County by zip code, and **Table 5** reflects the number of COVID-19 PCR tests administered by the commissioner precinct.^{xxxi}

Figure 7

COVID-19 Tests Administered by Recipient Zip Code January 1, 2020 – October 26, 2021



Source: Harris County Public Health

Between January 1, 2020 and October 26, 2021, providers in Harris County **administered 6,058,791 COVID-19 tests**. For a full list of tests administered by recipient zip code, see Appendix A.^{xxxii}

Table 5

COVID-19 Tests Administered, by Commissioner Precinct and for Harris County, January 1, 2020 – October 26, 2021

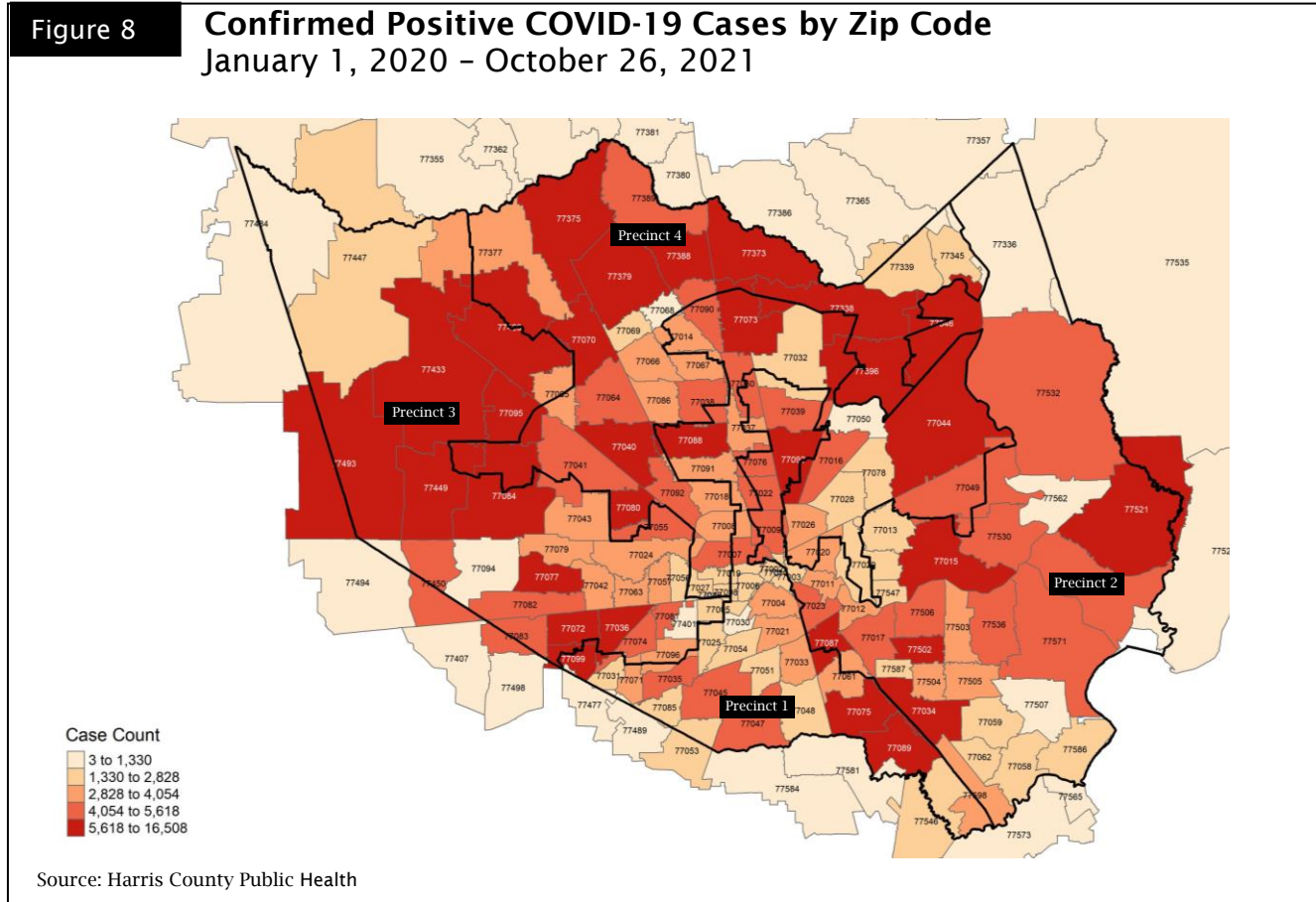
Precinct 1	Precinct 2	Precinct 3	Precinct 4	Total Tests
1,336,904	1,340,332	1,528,048	1,504,817	6,058,791

^{xxxi} PCR refers to the polymerase chain reaction tests commonly used to test for COVID-19.

^{xxxii} Precinct totals do not sum to Total Tests because 348,690 tests administered have addresses that cannot be geo-coded into a Precinct.

CONFIRMED POSITIVE COVID-19 CASES BY ZIP CODE

Figure 8 reflects the total number of COVID-19 positive cases confirmed by a PCR test in Harris County, reported by zip code and **Table 6** reflects the number of positive COVID-19 cases by commissioner precinct.^{xxxiii}



Between January 1, 2020 and October 26, 2021, there were **574,100 confirmed positive cases of COVID-19** in Harris County. For a full list of positive cases by zip code, see Appendix B.^{xxxiv}

Table 6

Confirmed Positive Cases by Commissioner Precinct and for Harris County, January 1, 2020 – October 26, 2021

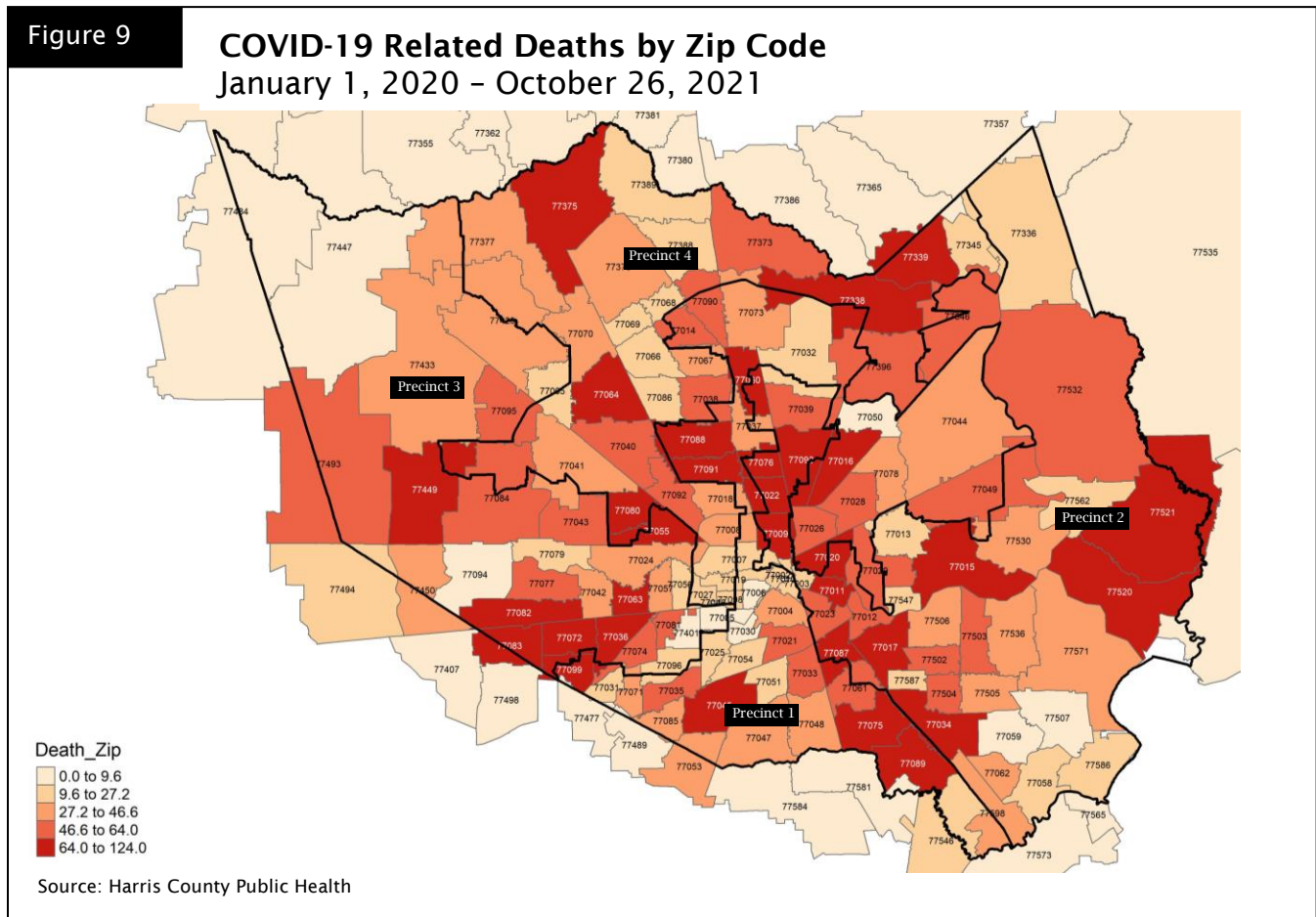
Precinct 1		Precinct 2		Precinct 3		Precinct 4		County	
Number of Cases	% of Precinct Population	Number of Cases	% of Precinct Population	Number of Cases	% of Precinct Population	Number of Cases	% of Precinct Population	Number of Cases	% of County Population
151,277	12.8%	144,803	13.7%	136,064	10.7%	138,371	11.3%	574,100	12.1%

^{xxxiii} PCR refers to the polymerase chain reaction tests commonly used to test for COVID-19.

^{xxxiv} Precinct totals do not sum to Total Positive Cases because 3,585 confirmed positive cases have addresses that cannot be geo-coded into a Precinct.

CONFIRMED COVID-19 RELATED DEATHS BY ZIP CODE

Figure 9 reflects the total number of confirmed COVID-19-related deaths in Harris County by zip code and **Table 7** reflects the number of COVID-19-related deaths by commissioner precinct.



Between January 1, 2020 and October 26, 2021, there were **6,130 confirmed COVID-19-related deaths** in Harris County. For a full list of deaths by zip code, see Appendix C.^{xxxv}

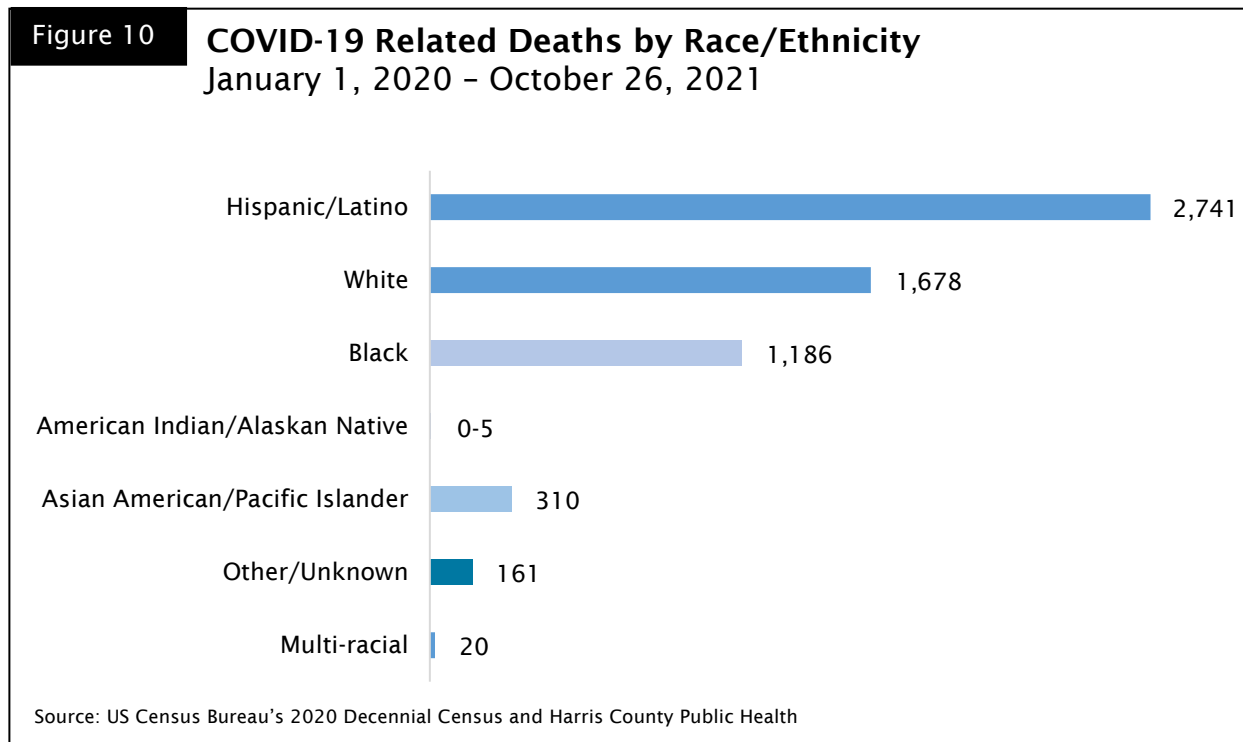
Table 7

COVID-19 Related Deaths by Commissioner Precinct and for Harris County, January 1, 2020 - October 26, 2021									
Precinct 1		Precinct 2		Precinct 3		Precinct 4		County Total	
Number of Deaths	% of Precinct Population	Number of Deaths	% of Precinct Population	Number of Deaths	% of Precinct Population	Number of Deaths	% of Precinct Population	Number of Deaths	% of County Population
1,826	0.15%	1,779	0.17%	1,309	0.10%	1,155	0.09%	6,130	0.13%

^{xxxv} Precinct totals do not sum to Total Deaths because 61 deaths have addresses that cannot be geo-coded into a precinct.

COVID-19 RELATED DEATHS BY RACE AND ETHNICITY

Figure 10 reflects the total number of confirmed COVID-19-related deaths in Harris County by race and ethnicity.^{xxxvi}



Of the 6,130 individuals in Harris County who died of a COVID-19-related death between January 1, 2020 and October 26, 2021:^{xxxvii}

- **44.7% (2,741) identified as Hispanic/Latino**, and for context, 43.0% of County residents identify as Hispanic;
- **27.4% (1,678) identified as White**, and for context, 27.7% of County residents identify as White;
- **19.3% (1,186) identified as Black**, and for context, 18.7% of County residents identify as Black;
- **0.1% (0-5) identified as American Indian or Alaskan Native**, and for context, 0.2% of County residents identify as American Indian or Alaskan Native;
- **5.1% (310) identified as Asian or Pacific Islander**, and for context, 7.4% of County residents identify as Asian, Pacific Islander, or Native Hawaiian;
- **2.6% (161) were recorded as Other/Unknown race and ethnicity**; and
- **0.3% (20) identified as Multi-racial**, and for context, 2.6% of County residents identify as Two or More Races.

^{xxxvi} Race and ethnicity totals do not sum to Total Precinct Deaths because 31 deaths do not have race and ethnicity data available.

^{xxxvii} County-level race and ethnicity data are derived from the 2020 Census population estimates.

APPENDIX A

Total COVID-19 Tests Administered by Zip Code Ordered by Tests Administered, January 1, 2020 – October 26, 2021							
Zip Code	Tests Administered	Zip Code	Tests Administered	Zip Code	Tests Administered	Zip Code	Tests Administered
77565	256	77051	18,507	77087	37,487	77054	55,405
77362	288	77011	18,623	77041	37,551	77024	55,674
77381	288	77003	18,909	77079	37,570	77055	56,561
77382	352	77069	19,480	77045	37,811	77389	56,950
77380	485	77058	20,240	77047	38,164	77339	57,053
77354	753	77026	21,485	77025	38,745	77070	57,124
77477	938	77523	22,093	77035	38,795	77036	58,684
77355	950	77059	22,416	77042	38,851	77536	58,763
77535	1,238	77587	22,913	77019	39,326	77571	58,966
77386	1,278	77098	24,767	77093	39,697	77502	59,335
77507	1,282	77067	24,935	77080	39,983	77044	59,735
77489	1,290	77447	25,940	77065	40,310	77082	60,474
77010	1,404	77048	26,010	77530	40,796	77007	63,510
77581	1,700	77022	26,166	77034	41,413	77388	64,151
77357	1,735	77086	26,207	77504	41,430	77089	66,693
77498	1,834	77039	26,250	77074	41,579	77077	68,660
77365	2,530	77020	26,252	77075	41,641	77338	69,770
77046	2,646	77061	26,543	77006	41,732	77083	77,300
77584	2,724	77027	26,620	77503	41,853	77373	78,155
77573	2,952	77076	26,724	77073	42,491	77521	85,964
77407	3,215	77043	27,006	77532	42,601	77375	90,298
77494	3,417	77091	27,753	77096	42,883	77450	91,428
77050	4,078	77030	27,857	77057	43,684	77396	102,153
77546	5,537	77062	28,597	77090	43,867	77346	102,397
77094	10,509	77038	29,437	77002	44,230	77095	107,233
77068	11,122	77060	29,799	77063	45,426	77379	110,099
77562	11,951	77023	30,517	77505	45,783	77084	110,464
77547	12,693	77016	30,723	77049	46,063	77005	121,599
77078	14,302	77092	30,724	77004	47,157	77429	126,345
77031	14,427	77021	30,895	77099	47,587	77433	148,197
77013	14,655	77014	31,429	77520	47,876	77449	186,486
77484	15,025	77066	32,278	77040	48,186		
77336	16,092	77071	32,802	77009	48,473		
77037	16,201	77017	34,212	77506	49,000		
77012	16,667	77018	34,697	77064	51,702		
77028	16,865	77081	35,271	77088	52,212		
77033	17,312	77586	35,507	77377	53,252		
77032	17,653	77345	36,284	77072	53,965		
77085	18,409	77056	36,295	77015	54,429		
77029	18,438	77401	37,137	77008	55,206		

APPENDIX B

Total COVID-19 Confirmed Positive Cases by Zip Code Ordered by Positive Cases, January 1, 2020 – October 26, 2021							
Zip Code	Positive Cases	Zip Code	Positive Cases	Zip Code	Positive Cases	Zip Code	Positive Cases
77362	3	77345	1,854	77079	3,630	77520	5,398
77382	3	77005	1,858	77067	3,713	77055	5,402
77381	4	77058	1,875	77065	3,767	77064	5,533
77565	5	77031	1,959	77066	3,815	77082	5,575
77355	5	77006	1,971	77503	3,844	77060	5,612
77535	9	77056	2,102	77042	3,867	77070	5,724
77354	10	77013	2,256	77020	3,939	77040	5,751
77386	20	77019	2,266	77086	3,974	77388	5,753
77357	22	77051	2,274	77033	3,976	77080	5,832
77573	22	77078	2,302	77063	3,989	77087	5,839
77380	25	77025	2,358	77091	4,008	77075	5,865
77498	47	77054	2,416	77377	4,031	77077	5,872
77010	60	77586	2,474	77057	4,046	77034	5,920
77365	72	77032	2,506	77035	4,056	77073	6,048
77407	72	77587	2,530	77041	4,133	77338	6,093
77507	77	77028	2,558	77039	4,145	77502	6,161
77584	90	77062	2,568	77047	4,235	77099	6,618
77523	128	77339	2,698	77092	4,271	77072	6,879
77581	146	77085	2,758	77023	4,282	77044	6,999
77046	170	77002	2,769	77022	4,304	77093	7,229
77477	278	77029	2,810	77038	4,304	77375	7,356
77484	345	77048	2,813	77389	4,326	77088	7,485
77050	527	77011	2,888	77007	4,393	77373	7,634
77494	591	77037	2,891	77532	4,415	77089	7,642
77094	798	77598	2,895	77016	4,496	77095	7,779
77489	979	77004	2,915	77450	4,629	77521	7,807
77068	1,172	77018	2,970	77083	4,757	77015	8,099
77562	1,222	77043	3,137	77090	4,782	77396	8,160
77401	1,224	77021	3,152	77045	4,791	77036	8,321
77030	1,266	77012	3,215	77536	4,791	77346	8,681
77336	1,293	77061	3,255	77530	4,838	77379	8,932
77098	1,354	77096	3,271	77009	4,845	77429	9,225
77059	1,431	77505	3,287	77571	4,944	77433	10,755
77547	1,471	77071	3,314	77074	4,984	77084	13,939
77003	1,504	77026	3,333	77017	5,072	77449	16,508
77027	1,684	77024	3,338	77076	5,196		
77546	1,753	77504	3,345	77049	5,349		
77069	1,781	77008	3,501	77081	5,357		
77447	1,819	77014	3,614	77506	5,375		

APPENDIX C

Total Confirmed COVID-19 Related Deaths by Zip Code Ordered by Number of Deaths, January 1, 2020 – October 26, 2021							
Zip Code	COVID Deaths	Zip Code	COVID Deaths	Zip Code	COVID Deaths	Zip Code	COVID Deaths
77565	0-5	77069	14	77598	36	77040	62
77362	0-5	77054	14	77530	36	77023	63
77382	0-5	77389	15	77429	36	77346	63
77381	0-5	77547	16	77042	37	77339	64
77355	0-5	77546	16	77047	37	77063	64
77535	0-5	77065	16	77070	38	77060	64
77354	0-5	77345	17	77004	39	77075	65
77386	0-5	77056	17	77057	39	77091	66
77357	0-5	77002	17	77571	40	77064	66
77573	0-5	77562	18	77506	40	77375	67
77380	0-5	77079	19	77450	42	77015	68
77498	0-5	77066	20	77044	45	77011	70
77010	0-5	77388	20	77433	45	77034	70
77365	0-5	77025	21	77038	47	77083	74
77407	0-5	77003	22	77043	48	77045	74
77507	0-5	77013	22	77039	48	77099	75
77584	0-5	77031	23	77028	50	77017	77
77523	0-5	77058	24	77090	50	77080	80
77046	0-5	77051	25	77021	51	77076	81
77477	0-5	77032	26	77092	53	77020	83
77484	0-5	77587	27	77014	54	77016	83
77094	0-5	77096	27	77503	54	77521	84
77447	0-5	77086	27	77077	54	77009	86
77489	6	77085	28	77029	56	77055	86
77030	6	77037	29	77061	56	77082	87
77059	7	77377	29	77532	56	77093	93
77006	7	77536	29	77502	56	77338	94
77581	8	77078	30	77373	56	77089	94
77050	8	77505	30	77012	58	77087	96
77401	9	77071	30	77081	58	77022	100
77005	9	77008	30	77396	59	77520	105
77068	10	77067	30	77035	60	77088	105
77098	10	77379	30	77074	60	77036	106
77027	10	77048	32	77095	60	77072	112
77019	10	77073	32	77026	61	77449	124
77007	12	77018	33	77033	61		
77494	13	77041	33	77049	61		
77336	13	77024	34	77084	61		
77586	13	77062	35	77504	62		

APPENDIX D

Number of Individuals Per 100,000 Residents Fully Vaccinated and Social Vulnerability Index (SVI), Ordered by Residents Vaccinated, December 14, 2020 – October 26, 2021^{xxxviii}

Zip Code	Per 100k Rate	SVI	Zip Code	Per 100k Rate	SVI	Zip Code	Per 100k Rate	SVI	Zip Code	Per 100k Rate	SVI
77336	34,820	0.30	77051	47,580	0.80	77429	53,738	0.06	77057	60,705	0.34
77090	36,671	0.70	77048	47,594	0.85	77433	53,906	0.11	77089	61,141	0.47
77532	39,252	0.37	77338	48,229	0.58	77375	53,964	0.45	77389	61,409	0.14
77562	40,200	0.63	77080	48,312	0.83	77505	54,135	0.24	77003	61,413	0.61
77520	42,678	0.82	77044	48,485	0.41	77388	54,221	0.13	77079	61,528	0.27
77067	42,883	0.79	77034	48,858	0.67	77377	54,425	0.24	77009	62,393	0.62
77050	42,947	0.71	77049	48,876	0.63	77449	54,542	0.36	77041	62,534	0.31
77004	42,998	0.53	77504	48,954	0.88	77084	54,934	0.36	77094	62,621	NA
77530	43,082	0.59	77016	49,037	0.89	77069	55,235	0.22	77054	62,955	0.26
77060	43,437	0.94	77061	49,106	0.70	77066	55,285	0.59	77083	65,271	0.53
77521	43,734	0.64	77088	49,348	0.77	77017	55,365	0.66	77025	65,852	0.32
77013	45,180	0.98	77086	49,547	0.78	77082	55,808	0.54	77032	69,283	0.99
77091	45,260	0.92	77035	49,559	0.74	77095	55,913	0.23	77006	69,921	0.09
77036	45,368	0.93	77033	49,593	0.93	77379	56,517	0.21	77008	70,671	0.08
77503	45,640	0.82	77502	50,584	0.89	77450	56,720	0.18	77005	71,018	0.03
77028	46,024	0.84	77022	50,824	0.97	77087	56,801	1.00	77002	71,983	0.42
77078	46,039	0.89	77047	50,995	0.55	77055	56,861	0.68	77059	72,864	0.05
77039	46,064	0.73	77038	51,460	0.50	77023	57,155	0.76	77007	73,703	0.01
77571	46,143	0.38	77020	51,501	0.89	77099	57,180	0.80	77401	76,805	0.03
77093	46,162	0.97	77075	51,697	0.61	77092	57,251	0.75	77098	81,290	0.07
77021	46,259	0.74	77068	51,728	0.43	77045	57,401	0.84	77019	84,297	0.09
77026	46,271	0.94	77586	51,758	0.18	77077	57,636	0.29	77027	100,206	0.01
77396	46,371	0.51	77447	51,765	0.45	77064	57,668	0.47	77010	110,872	0.02
77073	46,373	0.50	77587	51,966	0.91	77096	58,197	0.39	77024	117,466	0.16
77506	46,636	0.95	77031	52,248	0.64	77085	58,407	0.60	77030	128,260	0.28
77076	46,747	0.86	77042	52,432	0.38	77072	58,477	0.87	77056	135,227	0.14
77081	46,858	0.81	77346	52,499	0.12	77011	58,499	0.96	77507	152,208	NA
77536	46,989	0.44	77063	52,629	0.57	77345	58,609	0.05	77523	167,419	0.26
77598	47,062	0.57	77015	52,985	0.76	77029	58,637	0.88	77046	186,437	0.10
77037	47,091	0.69	77065	53,108	0.43	77071	58,804	0.68	77498	358,333	0.33
77373	47,253	0.30	77070	53,279	0.49	77043	59,005	0.52			
77074	47,347	0.86	77012	53,330	0.99	77018	59,760	0.48			
77014	47,501	0.78	77040	53,492	0.55	77339	60,326	0.32			
77547	47,502	0.66	77058	53,581	0.46	77062	60,622	0.19			

^{xxxviii} Table excludes data for zip codes with unavailable population and vaccination data.



The Harris County Commissioners Court's Analyst's Office provides the Harris County Commissioners Court members with objective, nonpartisan, and timely fiscal and policy analysis related to the efficiency and effectiveness of various County operations.

This memo was prepared by Amy Rose, Senior Analyst; Ramin Naderi, Analyst.

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